ABSTRACT

The present invention is to provide a high-precision sintered cam lobe part which has high dimensional accuracy even when producing a cam lobe having a complicated shape and needs no grinding processing after fabricated while it has high wear resistance and pitting resistance.

In order to attain the above object, the high-precision sintered cam lobe part of the present invention is a sintered cam lobe part obtained by subjecting a sintering powder to compression-molding and sintering one time only or two or more times repetitively to make the powder into a predetermined form and by carrying out thermal refining of the resulting body as required, wherein the cam lobe part is made of an iron-based sintered alloy comprising one or both of 0.3 to 5.0% by weight of Ni and 0.2 to 4.0% by weight of Cu, 0.5 to 1.2% by weight of C and unavoidable impurities, which is balanced with Fe, and has a density of 7.3 g/cm^3 or more, the hardness of the outer periphery of the cam lobe of 45 HRC or more and the rate of dimensional change from the molded body obtained in the final compressing process to the sintered body obtained in the final sintering process within ±0.5%.